

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Apparatus for forming a terminal on a battery, wherein the battery has a lid having a metal bush and a post connecting a group within the battery and located with its free end in the bush including:

[(a)] a fusing device for fusing the post to the bush to form an assembly,

[(b)] a [[mould]] mold having a cavity capable of receiving the assembly; and ~~for forming or finishing a terminal~~
~~means for characterised in that the mould cavity~~
~~extends above the intended height of the terminal to allow for~~
~~allowing overfilling of the [[mould]] mold above a predetermined~~
~~final fill level, and for controllably allowing contents of the~~
~~overfilled mold to flow out so that the contents reach the~~
~~cavity includes a constant height structure to define the~~
~~predetermined final fill level of the [[mould]] mold.~~

2. (currently amended) Apparatus as claimed in Claim 1, wherein the means for overfilling comprises: further
including

a feed channel adjacent the mold; and

a pump for pumping molten material into the cavity

through the feed channel.

3. (currently amended) Apparatus as claimed in Claim [[1]] 2, wherein the means for overfilling further comprises: ~~wherein the molten material is introduced into the mould via the~~ a constant height structure defining the predetermined final fill level, via which the molten material can be introduced into the mold.

4. (original) Apparatus as claimed in Claim 3 wherein the constant height structure is in communication with an inlet/outlet channel.

5. (original) Apparatus as claimed in Claim 4 wherein the inlet/outlet channel includes a valve for determining the height of molten material in the inlet/outlet channel relative to the constant height structure.

6. (previously presented) Apparatus as claimed in claim 1 wherein the constant height structure is a weir.

7. (currently amended) Apparatus as claimed in Claim 6 wherein the weir is inclined downwardly in the a direction of outflow of the contents of the overfilled mold from the cavity.

8. (currently amended) Apparatus as claimed in claim 1 further including a displacement body for introduction into the [[mould]] mold cavity to ensure that any excess material flows out of the [[mould]] mold.

9. (previously presented) Apparatus as claimed in claim 1 wherein the fusing device is a heatable probe for

engaging and fusing the post and bush.

10. (original) Apparatus as claimed in Claim 9 wherein the tip of the probe is formed to engage the tip of the post.

11. (previously presented) Apparatus as claimed in Claim 9 wherein the probe has a dependent skirt at its tip for melting at least part of the inner periphery of the bush.

12. (currently amended) Apparatus as claimed in claim 8 [[9]] wherein the probe is mounted for movement into and out of the [[mould]] mold cavity.

13. (currently amended) Apparatus as claimed in Claim 12 ~~above dependent on Claim 8~~ wherein the probe constitutes the displacement body.

14. (currently amended) Apparatus as claimed in claim 9, further comprising wherein the probe is heated by at least one gas jet positioned to allow heating of the probe.

15. (currently amended) Apparatus as claimed in Claim 14 further including a control for increasing the strength of the gas jet when the probe is remote from the cavity after molding moulding to surface treat the tip of the terminal and/or to displace any flashings from the terminal.

16. (currently amended) Apparatus as claimed in claim 3 [[1]] wherein a part of the [[mould]] mold includes a thermal break adjacent between the constant height structure and the feed channel ~~the level of the lid of the box to retain heat at the base of the mould~~.

17. (currently amended) A method for forming a terminal on a battery wherein the battery has a lid having a metal bush and a post connected to a group within the battery and located with its free end in the bush comprising steps of:
wherein

providing a mold having an inlet/outlet;
fusing the post is initially fused to the bush; and
molding the terminal is moulded on the fused bush and post
assembly in a the mold [[mould]] encircling the assembly by
characterised in that the mould is initially overfilled
overfilling the mold above a bottom level of the inlet/outlet
with terminal forming material and subsequently allowing the
excess said terminal forming material is allowed to flow out of
the mold via the inlet/outlet [[mould]].

18. (currently amended) A method as claimed in Claim 17 wherein the post is fused to the bush whilst located in the mold [[mould]].

19. (currently amended) A method as claimed in Claim 18 wherein the post and bush are fused by engagement by a heated probe introduced into the cavity of the mold [[mould]].

20. (currently amended) A method as claimed in Claim 18 wherein the probe is withdrawn from the cavity during filling of the mold [[mould]] and subsequently dipped into the mold [[mould]] cavity to displace any remaining excess material.

21. (previously presented) A method as claimed in

claim 17 wherein a jet of hot gas is played on the surface of the terminal, after the excess material has flowed out, to remove any flashings.

22. (currently amended) A method as claimed in claim 17 wherein heat is retained in area of the assembly whilst the terminal solidifies by providing a thermal break near the inlet/outlet.

23. (currently amended) A method as claimed in claim 17, comprising a further step of reheating wherein the tip of the terminal is re-heated as solidification occurs.

24. (new) An apparatus for forming a terminal on a battery, wherein the battery has a lid having a metal bush and a post connecting a group within the battery and located with a free end of the post in the bush, comprising:

a fusing device for fusing the post to the bush to form an assembly;

a mold having a cavity receiving the assembly and for forming or finishing a terminal;

wherein the mould cavity is constructed and arranged so that the mold cavity extends above an-intended height of the terminal, so as to allow overfilling of the mold, the mold cavity further comprising a constant height structure, the constant height structure defining a predetermined final fill level of the mold.